CRF Errors Corrected by the STIC Systems Branch

Serial Number: 10/040,206A

CRF Processing Date: 10/25/02

Edited by: _____

Verified by: _____X_____ (STIC staff)

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically: _____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included: _____

☒ Deleted extra, invalid, headings used by an applicant, specifically: In Seq. 5, deleted the word, "Length;" which was extraneous

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐ Other: _____

_____

_____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

OIPE

RAW SEQUENCE LISTING   DATE: 10/25/2002
PATENT APPLICATION: US/10/040,206A   TIME: 10:44:24

Input Set : **A:\PTO.DC.txt**
Output Set: **N:\CRF4\10252002\J040206A.raw**

```
   3 <110> APPLICANT: Lingappa, Jaisri
   4        Lingappa, Vishwanath
   6 <120> TITLE OF INVENTION: HIV Capsid Assembly Associated Compositions and Methods
   8 <130> FILE REFERENCE: UCSF.002.01US
  10 <140> CURRENT APPLICATION NUMBER: US 10/040,206A
  11 <141> CURRENT FILING DATE: 2002-01-02
  13 <150> PRIOR APPLICATION NUMBER: US 60/039,309
  14 <151> PRIOR FILING DATE: 1997-02-07
  16 <150> PRIOR APPLICATION NUMBER: US 09/020,144
  17 <151> PRIOR FILING DATE: 1998-02-06
  19 <160> NUMBER OF SEQ ID NOS: 6
  21 <210> SEQ ID NO: 1
  22 <211> LENGTH: 1610
  23 <212> TYPE: DNA
  24 <213> ORGANISM: HIV
  26 <220> FEATURE:
  27 <223> OTHER INFORMATION: DNA coding sequence for HIV capsid protein Pr55
  29 <400> SEQUENCE: 1
C--> 31 atgggtgcga gagcgtcggt attaagcggg ggagaattag ataaatggga aaaaattcgg     60
  32 ttaaggccag ggggaaagaa aaaatataag ttaaaacata tagtatgggc aagcagggag    120
  33 ctagaacgat tcgcagtcaa tcctggcctg ttagaaacat cagaaggctg cagacaaata    180
  34 ttgggacagc tacagccatc ccttcagaca ggatcagaag aacttagatc attatataat    240
  35 acagtagcaa ccctctattg tgtacatcaa aggatagatg taaaagacac caaggaagct    300
  36 ttagagaaga tagaggaaga gcaaaacaaa agtaagaaaa aggcacagca agcagcagct    360
  37 gcagctggca caggaaacag cagccaggtc agccaaaatt accctatagt gcagaaccta    420
  38 caggggcaaa tggtacatca ggccatatca cctagaactt taaatgcatg ggtaaaagta    480
  39 gtagaagaaa aggctttcag cccagaagta atacccatgt tttcagcatt atcagaagga    540
  40 gccaccccac aagatttaaa caccatgcta aacacagtgg ggggacatca agcagccatg    600
  41 caaatgttaa aagagactat caatgaggaa gctgcagaat gggatagagt gcatccagtg    660
  42 catgcagggc ctattgcacc aggccaaatg agagaaccaa ggggaagtga catagcagga    720
  43 actactagta cccttcagga acaaatagga tggatgacaa ataatccacc tatcccagta    780
  44 ggagaaatct ataaaagatg gataatcctg ggattaaata aaatagtaag aatgtatagc    840
  45 cctaccagca ttctggacat aagacaagga ccaaaggaac cctttagaga ttatgtagac    900
  46 cggttctata aaactctaag agccgaacaa gcttcacagg atgtaaaaaa ttggatgaca    960
  47 gaaaccttgt tggtccaaaa tgcaaaccca gattgtaaga ctattttaaa agcattggga   1020
  48 ccagcagcta cactagaaga aatgatgaca gcatgtcagg gagtggggg acccggccat   1080
  49 aaagcaagag ttttggctga agccatgagc caagtaacaa atccagctaa cataatgatg   1140
  50 cagagaggca attttaggaa ccaaagaaag actgttaagt gtttcaattg tggcaaagaa   1200
  51 gggcacatag ccaaaaattg cagggcccct aggaaaaagg gctgttggag atgtggaagg   1260
  52 gaaggacacc aaatgaaaga ttgcactgag agacaggcta ttttttagg gaagatctgg   1320
  53 ccttcctaca agggaaggcc agggaatttt cttcagagca gaccagagcc aacagcccca   1380
  54 ccagaagaga gcttcaggtt tggggaggag aaaacaactc cctctcagaa gcaggagccg   1440
  55 atagacaagg aactgtatcc tttaacttcc ctcagatcac tctttggcaa cgacccctcg   1500
```

```
 56 tcacaataag gatagggggg caactaaagg aagctctatt agatacagga gcagatgata      1560
 57 cagtattaga agaaatgaat ttgccaggaa aatggaaacc aaaaatgata                  1610
 59 <210> SEQ ID NO: 2
 60 <211> LENGTH: 24
 61 <212> TYPE: PRT
 62 <213> ORGANISM: Triticum aestivum
 64 <220> FEATURE:
 65 <223> OTHER INFORMATION: peptide fragment of host cell (wheat germ) protein HP68
 67 <400> SEQUENCE: 2
 69  Pro Arg Pro Tyr Leu Asp Val Lys Gln Arg Leu Lys Ala Ala Arg Val
 70  1               5                  10                  15
 71  Ile Arg Ser Leu Leu Arg Ser Asn
 72              20
 74 <210> SEQ ID NO: 3
 75 <211> LENGTH: 44
 76 <212> TYPE: DNA
 77 <213> ORGANISM: Artificial Sequence
 79 <220> FEATURE:
 80 <223> OTHER INFORMATION: Degenerate oligonucleotide C-terminal peptide sequence of
WGHP68
 82 <400> SEQUENCE: 3
C--> 84 atgaattcac tgggactgcg gatagattac tggtactggg gatc  44
 86 <210> SEQ ID NO: 4
 87 <211> LENGTH: 42
 88 <212> TYPE: DNA
 89 <213> ORGANISM: Artificial Sequence
 91 <220> FEATURE:
 92 <223> OTHER INFORMATION: Degenerate oligonucleotide C-terminal peptide sequence of
WGHP68
 94 <400> SEQUENCE: 4
C--> 96 atgaattcac tgggctctga tagattactg gtactgggga tc  42
 98 <210> SEQ ID NO: 5
 99 <211> LENGTH: 604
100 <212> TYPE: PRT
101 <213> ORGANISM: Triticum aestivum
103 <400> SEQUENCE: 5
105 Met Ala Asp Arg Leu Thr Arg Ile Ala Ile Val Ser Glu Asp Lys Cys
106 1               5                  10                  15
107 Lys Pro Lys Lys Cys Arg Gln Glu Cys Lys Lys Ser Cys Pro Val Val
108             20                  25                  30
109 Lys Thr Gly Lys Leu Cys Ile Glu Val Ser Pro Val Ala Lys Leu Ala
110         35                  40                  45
111 Phe Ile Ser Glu Glu Leu Cys Ile Gly Cys Gly Ile Cys Val Lys Lys
112     50                  55                  60
113 Cys Pro Phe Asp Ala Ile Glu Ile Ile Asn Leu Pro Lys Asp Leu Glu
114 65                  70                  75                  80
115 Lys Asp Thr Thr His Arg Tyr Gly Pro Asn Thr Phe Lys Leu His Arg
116                 85                  90                  95
117 Leu Pro Val Pro Arg Pro Gly Gln Val Leu Gly Leu Val Gly Thr Asn
118             100                 105                 110
119 Gly Ile Gly Lys Ser Thr Ala Leu Lys Val Leu Ala Gly Lys Leu Lys
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RAW SEQUENCE LISTING   DATE: 10/25/2002
PATENT APPLICATION: US/10/040,206A   TIME: 10:44:24

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF4\10252002\J040206A.raw

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120          115                120                125
121 Pro Asn Leu Gly Arg Phe Lys Asn Pro Pro Asp Trp Gln Glu Ile Leu
122     130                135                140
123 Thr Tyr Phe Arg Gly Ser Glu Leu Gln Asn Tyr Phe Thr Arg Ile Leu
124 145                150                155                160
125 Glu Asp Asn Leu Lys Ala Ile Ile Lys Pro Gln Tyr Val Asp His Ile
126             165                170                175
127 Pro Lys Ala Val Gln Gly Asn Val Gly Gln Val Leu Glu Gln Lys Asp
128             180                185                190
129 Glu Arg Asp Met Lys Asn Glu Leu Cys Val Asp Leu Glu Leu Asn Gln
130         195                200                205
131 Val Ile Asp Arg Asn Val Gly Asp Leu Ser Gly Gly Glu Leu Gln Arg
132     210                215                220
133 Phe Ala Ile Ala Val Val Ala Val Gln Ser Ala Glu Ile Tyr Met Phe
134 225                230                235                240
135 Asp Glu Pro Ser Ser Tyr Leu Asp Val Lys Gln Arg Leu Lys Ala Ala
136             245                250                255
137 Arg Val Ile Arg Ser Leu Leu Arg Ser Asn Ser Tyr Val Ile Val Val
138         260                265                270
139 Glu His Asp Leu Ser Val Leu Asp Tyr Leu Ser Asp Phe Ile Cys Cys
140         275                280                285
141 Leu Tyr Gly Lys Pro Gly Ala Tyr Gly Val Val Thr Leu Pro Phe Ser
142     290                295                300
143 Val Arg Glu Gly Ile Asn Ile Phe Leu Ala Gly Phe Val Pro Thr Glu
144 305                310                315                320
145 Asn Leu Arg Phe Arg Asp Glu Ser Leu Thr Phe Lys Ile Ala Glu Thr
146             325                330                335
147 Gln Glu Ser Ala Glu Glu Val Ala Thr Tyr Gln Arg Tyr Lys Tyr Pro
148         340                345                350
149 Thr Met Ser Lys Thr Gln Gly Asn Phe Lys Leu Ser Val Val Glu Gly
150         355                360                365
151 Glu Phe Thr Asp Ser Gln Ile Val Val Met Leu Gly Glu Asn Gly Thr
152     370                375                380
153 Gly Lys Thr Thr Phe Ile Arg Met Leu Ala Gly Leu Leu Lys Pro Asp
154 385                390                395                400
155 Thr Met Glu Gly Thr Glu Val Glu Ile Pro Glu Phe Asn Val Ser Tyr
156             405                410                415
157 Lys Pro Gln Lys Ile Ser Pro Lys Phe Gln His Pro Val Arg His Leu
158         420                425                430
159 Leu His Ser Lys Ile Arg Asp Ser Tyr Thr His Pro Gln Phe Val Ser
160         435                440                445
161 Asp Val Met Lys Pro Leu Gln Ile Glu Gln Leu Met Asp Gln Glu Val
162     450                455                460
163 Ile Asn Leu Ser Gly Gly Glu Leu Gln Arg Val Ala Leu Cys Leu Cys
164 465                470                475                480
165 Leu Gly Lys Pro Ala Asp Ile Tyr Leu Ile Asp Glu Pro Ser Ala Tyr
166             485                490                495
167 Leu Asp Ser Glu Gln Arg Ile Val Ala Ser Lys Val Ile Lys Arg Phe
168         500                505                510
```

```
169 Ile Leu His Ala Lys Lys Thr Ala Phe Ile Val Glu His Asp Phe Ile
170         515             520           `        525
171 Met Ala Thr Tyr Leu Ala Asp Lys Val Ile Val Tyr Glu Gly Leu Ala
172     530             535           540
173 Ser Ile Asp Cys Thr Ala Asn Ala Pro Gln Ser Leu Val Ser Gly Met
174 545             550           555                 560
175 Asn Lys Phe Leu Ser His Leu Asp Ile Thr Phe Arg Arg Asp Pro Thr
176             565             570                 575
177 Asn Tyr Arg Pro Arg Ile Asn Lys Leu Glu Ser Thr Lys Asp Arg Glu
178         580             585                 590
179 Gln Lys Asn Ala Gly Ser Tyr Tyr Tyr Leu Asp Asp
180         595             600

182 <210> SEQ ID NO: 6
183 <211> LENGTH: 599
184 <212> TYPE: PRT
185 <213> ORGANISM: Homo sapiens

187 <400> SEQUENCE: 6

189 Met Ala Asp Lys Leu Thr Arg Ile Ala Ile Val Asn His Asp Lys Cys
190 1           5               10               15
191 Lys Pro Lys Lys Cys Arg Gln Glu Cys Lys Lys Ser Cys Pro Val Val
192         20              25              30
193 Arg Met Gly Lys Leu Cys Ile Glu Val Thr Pro Gln Ser Lys Ile Ala
194         35              40              45
195 Trp Ile Ser Glu Thr Leu Cys Ile Gly Cys Gly Ile Cys Ile Lys Lys
196     50              55              60
197 Cys Pro Phe Gly Ala Leu Ser Ile Val Asn Leu Pro Ser Asn Leu Glu
198 65              70              75                  80
199 Lys Glu Thr Thr His Arg Tyr Cys Ala Asn Ala Phe Lys Leu His Arg
200             85              90              95
201 Leu Pro Ile Pro Arg Pro Gly Glu Val Leu Gly Leu Val Gly Thr Asn
202         100             105             110
203 Gly Ile Gly Lys Ser Ala Ala Leu Lys Ile Leu Ala Gly Lys Gln Lys
204         115             120             125
205 Pro Asn Leu Gly Lys Tyr Asp Asp Pro Pro Asp Trp Gln Glu Ile Leu
206 130             135             140
207 Thr Tyr Phe Arg Gly Ser Glu Leu Gln Asn Tyr Phe Thr Lys Ile Leu
208 145             150             155                 160
209 Glu Asp Asp Leu Lys Ala Ile Ile Lys Pro Gln Tyr Val Ala Arg Phe
210             165             170                 175
211 Leu Arg Leu Ala Lys Gly Thr Val Gly Ser Ile Leu Asp Arg Lys Asp
212             180             185                 190
213 Glu Thr Lys Thr Gln Ala Ile Val Cys Gln Gln Leu Asp Leu Thr His
214         195             200                 205
215 Leu Lys Glu Arg Asn Val Glu Asp Leu Ser Gly Gly Glu Leu Gln Arg
216     210             215             220
217 Phe Ala Cys Ala Val Val Cys Ile Gln Lys Ala Asp Ile Phe Met Phe
218 225             230             235                 240
219 Asp Glu Pro Ser Ser Tyr Leu Asp Val Lys Gln Arg Leu Lys Ala Ala
220             245             250                 255
```

```
221 Ile Thr Ile Arg Ser Leu Ile Asn Pro Asp Arg Tyr Ile Ile Val Val
222          260            265            270
223 Glu His Asp Leu Ser Val Leu Asp Tyr Leu Ser Asp Phe Ile Cys Cys
224          275            280            285
225 Leu Tyr Gly Val Pro Ser Ala Tyr Gly Val Val Thr Met Pro Phe Ser
226          290            295            300
227 Val Arg Glu Gly Ile Asn Ile Phe Leu Asp Gly Tyr Val Pro Thr Glu
228 305            310            315            320
229 Asn Leu Arg Phe Arg Asp Ala Ser Leu Val Phe Lys Val Ala Glu Thr
230          325            330            335
231 Ala Asn Glu Glu Glu Val Lys Lys Met Cys Met Tyr Lys Tyr Pro Gly
232          340            345            350
233 Met Lys Lys Lys Met Gly Glu Phe Glu Leu Ala Ile Val Ala Gly Glu
234          355            360            365
235 Phe Thr Asp Ser Glu Ile Met Val Met Leu Gly Glu Asn Gly Thr Gly
236          370            375            380
237 Lys Thr Thr Phe Ile Arg Met Leu Ala Gly Arg Leu Lys Pro Asp Glu
238 385            390            395            400
239 Gly Gly Glu Val Pro Val Leu Asn Val Ser Tyr Lys Pro Gln Lys Ile
240          405            410            415
241 Ser Pro Lys Ser Thr Gly Ser Val Arg Gln Leu Leu His Glu Lys Ile
242          420            425            430
243 Arg Asp Ala Tyr Thr His Pro Gln Phe Val Thr Asp Val Met Lys Pro
244          435            440            445
245 Leu Gln Ile Glu Asn Ile Ile Asp Gln Glu Val Gln Thr Leu Ser Gly
246          450            455            460
247 Gly Glu Leu Gln Arg Val Arg Leu Arg Leu Cys Leu Gly Lys Pro Ala
248 465            470            475            480
249 Asp Val Tyr Leu Ile Asp Glu Pro Ser Ala Tyr Leu Asp Ser Glu Gln
250          485            490            495
251 Arg Leu Met Ala Ala Arg Val Val Lys Arg Phe Ile Leu His Ala Lys
252          500            505            510
253 Lys Thr Ala Phe Val Val Glu His Asp Phe Ile Met Ala Thr Tyr Leu
254          515            520            525
255 Ala Asp Arg Val Ile Val Phe Asp Gly Val Pro Ser Lys Asn Thr Val
256          530            535            540
257 Ala Asn Ser Pro Gln Thr Leu Leu Ala Gly Met Asn Lys Phe Leu Ser
258 545            550            555            560
259 Gln Leu Glu Ile Thr Phe Arg Arg Asp Pro Asn Asn Tyr Arg Pro Arg
260          565            570            575
261 Ile Asn Lys Leu Asn Ser Ile Lys Asp Val Glu Gln Lys Lys Ser Gly
262          580            585            590
263 Asn Tyr Phe Phe Leu Asp Asp
264          595
```

VERIFICATION SUMMARY   DATE: 10/25/2002
PATENT APPLICATION: **US/10/040,206A**   TIME: 10:44:25

       Input Set : **A:\PTO.DC.txt**
       Output Set: **N:\CRF4\10252002\J040206A.raw**

```
.L:31 M:112 C: (48) String data converted to lower case,
M:112 Repeated in SeqNo=1
L:84 M:112 C: (48) String data converted to lower case,
L:96 M:112 C: (48) String data converted to lower case,
```

OIPE

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING　　　　　　　DATE: 10/17/2002
PATENT APPLICATION:　US/10/040,206A　　TIME: 11:36:52

Input Set : **A:\seqlist.txt**
Output Set: **N:\CRF4\10172002\J040206A.raw**

```
  3 <110> APPLICANT: Lingappa, Jaisri
  4         Lingappa, Vishwanath
  6 <120> TITLE OF INVENTION: HIV Capsid Assembly Associated Compositions and Methods
  8 <130> FILE REFERENCE: UCSF.002.01US
 10 <140> CURRENT APPLICATION NUMBER: US 10/040,206A
 11 <141> CURRENT FILING DATE: 2002-01-02
 13 <150> PRIOR APPLICATION NUMBER: US 60/039,309
 14 <151> PRIOR FILING DATE: 1997-02-07
 16 <150> PRIOR APPLICATION NUMBER: US 09/020,144
 17 <151> PRIOR FILING DATE: 1998-02-06
 19 <160> NUMBER OF SEQ ID NOS: 6
```

ERRORED SEQUENCES

delete

```
 98 <210> SEQ ID NO: 5
 99 <211> LENGTH: (Length)604
100 <212> TYPE: PRT
101 <213> ORGANISM: Triticum aestivum
103 <400> SEQUENCE: 5
105 Met Ala Asp Arg Leu Thr Arg Ile Ala Ile Val Ser Glu Asp Lys Cys
106 1               5                   10                  15
107 Lys Pro Lys Lys Cys Arg Gln Glu Cys Lys Lys Ser Cys Pro Val Val
108             20                  25                  30
109 Lys Thr Gly Lys Leu Cys Ile Glu Val Ser Pro Val Ala Lys Leu Ala
110         35                  40                  45
111 Phe Ile Ser Glu Glu Leu Cys Ile Gly Cys Gly Ile Cys Val Lys Lys
112   . 50                  55                  60
113 Cys Pro Phe Asp Ala Ile Glu Ile Ile Asn Leu Pro Lys Asp Leu Glu
114 65                  70                  75                  80
115 Lys Asp Thr Thr His Arg Tyr Gly Pro Asn Thr Phe Lys Leu His Arg
116             85                  90                  95
117 Leu Pro Val Pro Arg Pro Gly Gln Val Leu Gly Leu Val Gly Thr Asn
118             100                 105                 110
119 Gly Ile Gly Lys Ser Thr Ala Leu Lys Val Leu Ala Gly Lys Leu Lys
120         115                 120                 125
121 Pro Asn Leu Gly Arg Phe Lys Asn Pro Pro Asp Trp Gln Glu Ile Leu
122     130                 135                 140
123 Thr Tyr Phe Arg Gly Ser Glu Leu Gln Asn Tyr Phe Thr Arg Ile Leu
124 145                 150                 155                 160
125 Glu Asp Asn Leu Lys Ala Ile Ile Lys Pro Gln Tyr Val Asp His Ile
126             165                 170                 175
127 Pro Lys Ala Val Gln Gly Asn Val Gly Gln Val Leu Glu Gln Lys Asp
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RAW SEQUENCE LISTING   DATE: 10/17/2002
PATENT APPLICATION: US/10/040,206A   TIME: 11:36:52

Input Set : A:\seqlist.txt
Output Set: N:\CRF4\10172002\J040206A.raw

```
128           180              185              190
129 Glu Arg Asp Met Lys Asn Glu Leu Cys Val Asp Leu Glu Leu Asn Gln
130       195              200              205
131 Val Ile Asp Arg Asn Val Gly Asp Leu Ser Gly Gly Glu Leu Gln Arg
132    210              215              220
133 Phe Ala Ile Ala Val Val Ala Val Gln Ser Ala Glu Ile Tyr Met Phe
134 225              230              235              240
135 Asp Glu Pro Ser Ser Tyr Leu Asp Val Lys Gln Arg Leu Lys Ala Ala
136              245              250              255
137 Arg Val Ile Arg Ser Leu Leu Arg Ser Asn Ser Tyr Val Ile Val Val
138          260              265              270
139 Glu His Asp Leu Ser Val Leu Asp Tyr Leu Ser Asp Phe Ile Cys Cys
140       275              280              285
141 Leu Tyr Gly Lys Pro Gly Ala Tyr Gly Val Val Thr Leu Pro Phe Ser
142    290              295              300
143 Val Arg Glu Gly Ile Asn Ile Phe Leu Ala Gly Phe Val Pro Thr Glu
144 305              310              315              320
145 Asn Leu Arg Phe Arg Asp Glu Ser Leu Thr Phe Lys Ile Ala Glu Thr
146          325              330              335
147 Gln Glu Ser Ala Glu Glu Val Ala Thr Tyr Gln Arg Tyr Lys Tyr Pro
148          340              345              350
149 Thr Met Ser Lys Thr Gln Gly Asn Phe Lys Leu Ser Val Val Glu Gly
150          355              360              365
151 Glu Phe Thr Asp Ser Gln Ile Val Val Met Leu Gly Glu Asn Gly Thr
152    370              375              380
153 Gly Lys Thr Thr Phe Ile Arg Met Leu Ala Gly Leu Leu Lys Pro Asp
154 385              390              395              400
155 Thr Met Glu Gly Thr Glu Val Glu Ile Pro Glu Phe Asn Val Ser Tyr
156          405              410              415
157 Lys Pro Gln Lys Ile Ser Pro Lys Phe Gln His Pro Val Arg His Leu
158          420              425              430
159 Leu His Ser Lys Ile Arg Asp Ser Tyr Thr His Pro Gln Phe Val Ser
160       435              440              445
161 Asp Val Met Lys Pro Leu Gln Ile Glu Gln Leu Met Asp Gln Glu Val
162    450              455              460
163 Ile Asn Leu Ser Gly Gly Glu Leu Gln Arg Val Ala Leu Cys Leu Cys
164 465              470              475              480
165 Leu Gly Lys Pro Ala Asp Ile Tyr Leu Ile Asp Glu Pro Ser Ala Tyr
166              485              490              495
167 Leu Asp Ser Glu Gln Arg Ile Val Ala Ser Lys Val Ile Lys Arg Phe
168          500              505              510
169 Ile Leu His Ala Lys Lys Thr Ala Phe Ile Val Glu His Asp Phe Ile
170       515              520              525
171 Met Ala Thr Tyr Leu Ala Asp Lys Val Ile Val Tyr Glu Gly Leu Ala
172    530              535              540
173 Ser Ile Asp Cys Thr Ala Asn Ala Pro Gln Ser Leu Val Ser Gly Met
174 545              550              555              560
175 Asn Lys Phe Leu Ser His Leu Asp Ile Thr Phe Arg Arg Asp Pro Thr
176          565              570              575
```

RAW SEQUENCE LISTING   DATE: 10/17/2002
PATENT APPLICATION: US/10/040,206A   TIME: 11:36:52

Input Set : A:\seqlist.txt
Output Set: N:\CRF4\10172002\J040206A.raw

```
    177 Asn Tyr Arg Pro Arg Ile Asn Lys Leu Glu Ser Thr Lys Asp Arg Glu
    178             580             585             590
    179 Gln Lys Asn Ala Gly Ser Tyr Tyr Tyr Leu Asp Asp
E--> 180         595             600
```

VERIFICATION SUMMARY　　　　　　　　DATE: 10/17/2002
PATENT APPLICATION:　US/10/040,206A　　TIME: 11:36:53

Input Set : **A:\seqlist.txt**
Output Set: **N:\CRF4\10172002\J040206A.raw**

L:31 M:112 C: (48) String data converted to lower case,
M:112 Repeated in SeqNo=1
L:84 M:112 C: (48) String data converted to lower case,
L:96 M:112 C: (48) String data converted to lower case,
L:180 M:252 E: No. of Seq. differs, <211> LENGTH:Input:0 Found:604 SEQ:5